B2

8. (Amended) The vinyl polymer according to Claim 1

wherein said living radical polymerization is atom transfer radical polymerization.

11. (Amended) The vinyl polymer according to Claim 1,

which is obtained by the polymerization of a vinyl monomer using a chain transfer agent.

12. (Amended) The vinyl polymer according to Claim 1,

which is obtained by reacting an olefin polymer having a terminal structure represented by the general formula (2) with a compound represented by the general formula (3):

$$-CR^1R^2X$$

(2)

wherein R^1 and R^2 each represents a group attached to the ethylenically unsaturated group of the vinyl monomer; X represents chloro, bromo or iodo,

$$M^{+-}OC(O)C(R) = CH_2$$

(3)

wherein R represents hydrogen or an organic group containing 1 to 20 carbon atoms; M^{+} represents an alkali metal or quaternary ammonium ion.

13. (Amended) The vinyl polymer according to Claim 1,

which is obtained by reacting a hydroxyl-terminated vinyl polymer with a compound of the general formula (4):

$$XC(O)C(R) = CH_2$$
 (4)

wherein R represents halogen or an organic group containing 1 to 20 carbon atoms; X represents chloro, bromo, or a hydroxyl group.

14. (Amended) The vinyl polymer according to Claim 1,